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**BEFORE THE TENNESSEE REGULATORY AUTHORITY**

E.R.A. DOCKET ROOM

**NASHVILLE, TENNESSEE**

**August 5, 2003**

**IN RE:**

**CHATTANOOGA GAS COMPANY**

**WEATHER NORMALIZATION ADJ. (WNA) AUDIT )**

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) **Docket No. 03-00373**

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**NOTICE OF FILING BY THE ENERGY AND WATER DIVISION OF THE  
TENNESSEE REGULATORY AUTHORITY**

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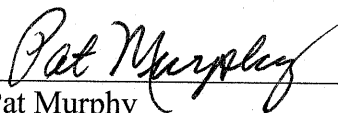
Pursuant to Tenn. Code Ann. §§ 65-4-104, 65-4-111 and 65-3-108, the Energy and Water Division of the Tennessee Regulatory Authority (the "Energy and Water Division") hereby gives notice of its filing of the Chattanooga Gas Company WNA Audit Report in this docket and would respectfully state as follows:

1. The present docket was opened by the Authority to hear matters arising out of the audit of Chattanooga Gas Company (the "Company").
2. The Company's WNA filings were received on November 1, 2002, through April 30, 2003, and the Staff completed its audit of same on June 3, 2003.
3. On June 4, 2003, the Energy and Water Division issued its preliminary WNA audit findings to the Company, and on July 23, 2003, the Company responded thereto.
4. The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report (the "Report") resulted therefrom. The Report is attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report

contains the audit findings of the Energy and Water Division, the Company's responses thereto and the recommendations of the Energy and Water Division in connection therewith.

5. The Energy and Water Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the recommendations and findings contained therein.

Respectfully Submitted:

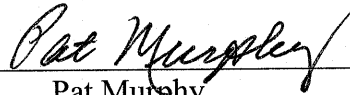
  
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Pat Murphy  
Energy and Water Division  
of the Tennessee Regulatory Authority

**CERTIFICATE OF SERVICE**

I hereby certify that on this 5th day of August, 2003, a true and exact copy of the foregoing has been either hand-delivered or delivered via U.S. Mail, postage pre-paid, to the following persons:

Deborah Taylor Tate  
Chairman  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, TN 37243

Mr. Archie Hickerson  
Manager - Rates  
Atlanta Gas Light Company  
Location 1686  
P.O. Box 4569  
Atlanta, GA 30302-4569

  
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Pat Murphy

# **EXHIBIT A**

COMPLIANCE AUDIT REPORT

OF

**CHATTANOOGA GAS COMPANY**

**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**DOCKET NO. 03-00373**

PREPARED BY

**TENNESSEE REGULATORY AUTHORITY**

ENERGY AND WATER DIVISION

AUGUST 2003

**COMPLIANCE AUDIT**  
**CHATTANOOGA GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**Docket No. 03-00373**

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**COMPLIANCE AUDIT**  
**CHATTANOOGA GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**DOCKET NO. 03-00373**

**I. INTRODUCTION AND AUDIT OPINION**

The subject of this compliance audit is the Weather Normalization Adjustment ("WNA") Rider of Chattanooga Gas Company ("CGC" or "Company"), a wholly owned subsidiary of AGL Resources, Inc. The objective of this audit is to determine if the WNA adjustments were calculated correctly and applied to customers' bill appropriately between November 1, 2002 and April 30, 2003. As a result of the WNA Rider, the Company surcharged a net \$158,753 and \$134,516 to the residential and commercial customers respectively during the period. The impact of WNA revenues on the Company's total revenues is detailed in Section V.

The Staff's audit results showed that the Company over-collected \$15,942 from its customers (\$8,517 from the residential customers and \$7,425 from the commercial customers). See Section VI for a description of the Staff's findings. The amount of the over-collection is immaterial (approximately \$0.05 per customer). Therefore, except for the findings noted in this report, Staff concludes that CGC is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Regulatory Authority ("TRA" or the "Authority") and included in the Company's tariff. (See Attachment 1)

**II. SCOPE OF AUDIT**

In meeting the objective of the audit, the Staff compared the following on a daily basis:

- (1) the Company's actual heating degree days to National Oceanic and Atmospheric Administration ("NOAA") actual heating degree days;
- (2) the Company's normal heating degree days to the normal heating degree days calculated in the last rate case; and
- (3) the Company's calculation of the WNA factor to Staff's calculation.

Pat Murphy and Butch Phillips of the Energy and Water Division conducted this audit.

### **III. BACKGROUND INFORMATION ON THE COMPANY**

Chattanooga Gas Company, with its headquarters at 6125 Preservation Drive, Chattanooga, Tennessee, is a wholly owned subsidiary of AGL Resources, Inc., which has its headquarters at Ten Peachtree Place, Atlanta, Georgia. CGC is a gas distributor, which provides service to the cities of Chattanooga and Cleveland and surrounding environs in Hamilton and Bradley counties, all located in Southeast Tennessee. The natural gas used to serve these areas is purchased from various suppliers and transported by East Tennessee Natural Gas and Southern Natural Gas under tariffs approved by the Federal Energy Regulatory Commission ("FERC").

### **IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT RIDER**

On September 26, 1991, the Tennessee Public Service Commission<sup>1</sup> ("PSC") approved a three-year experimental Weather Normalization Adjustment Rider to the tariffs of Chattanooga Gas Company, Nashville Gas Company, a division of Piedmont Gas Company, Inc. and United Cities Gas Company.<sup>2</sup> The WNA Rider was to be applied to residential and commercial customers' bills during the months of October through May of each year (*See* Attachment 1). On June 21, 1994, the PSC issued an Order authorizing the above mentioned gas companies to permanently implement an amended version of the WNA Rider.<sup>3</sup> The TRA Staff annually audits these calculations.

In setting rates, the Tennessee Regulatory Authority uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. Use of normalized operating levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low.

Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years weather data.

However, normal weather rarely occurs. This has two impacts:

- (1) The customers' bills fluctuate dramatically due to changes in weather from month to month; and

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<sup>1</sup> By legislative action, the Public Service Commission was replaced on July 1, 1996 by the Tennessee Regulatory Authority. *See* Act of May 24, 1995, ch. 305, 1995 Tenn. Pub. Acts 450. The TRA retains jurisdiction over the above named gas companies. *See* Tenn. Code Ann. § 65-4-104; *see also* Tenn. Code Ann. § 65-4-101 (a) (defining public utility).

<sup>2</sup> *See* petition of Chattanooga Gas Company, Nashville Gas Company, a Division of Piedmont Natural Gas Company, Inc. and United Cities Gas Company for a Rulemaking Hearing to Adopt a Weather Normalization Adjustment (WNA) Rider, Docket No. 91-01712, *Order* (September 26, 1991).

<sup>3</sup> The amendment directed Chattanooga Gas Company and United Cities Gas Company to eliminate from their WNA Rider the shoulder months of October and May, and Nashville Gas Company to eliminate the shoulder months of October, April and May.

- (2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will underearn.

In recognition of this fact, the TRA approved an experimental WNA mechanism, which became permanent on June 21, 1994, to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. In periods of weather colder than normal, the customer receives a credit on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return.

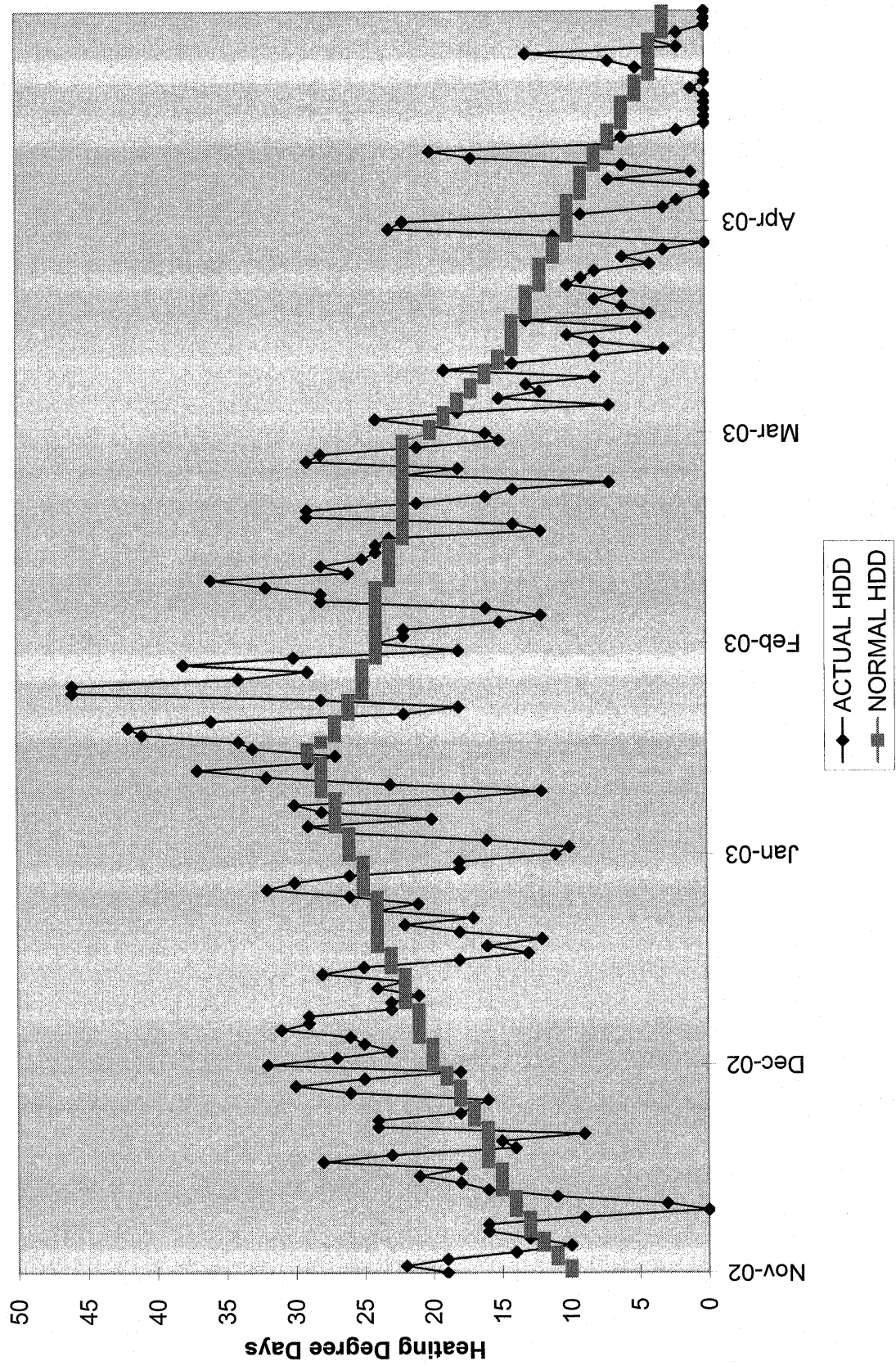
The graph (found at the end of this section) compares the actual heating degree days to normal heating degree days for Chattanooga Gas during the 2002 - 2003 heating season. The table below quantifies the number of actual heating degree days by month as compared to the normal heating degree days for that month. It shows that overall the weather was slightly warmer than normal, resulting in a net surcharge to CGC's customers for the period.

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
October 2002	88	189	Warmer
November 2002	512	446	Colder
December 2002	710	707	Colder
January 2003	878	819	Colder
February 2003	614	636	Warmer
March 2003	333	443	Warmer
April 2003	114	186	Warmer
Total	3,249	3,426	Warmer



# Chattanooga Gas Company

## Comparison of Actual to Normal Heating Degree Days



## V. IMPACT OF WNA RIDER

Since the overall winter period for Chattanooga was slightly warmer than normal. As a result, the net impact of the WNA Rider during the November 1, 2002 through April 30, 2003 WNA period was that residential and commercial customers were **surcharged** an additional \$ 158,753 and \$134,516 respectively. This equates to increases in revenues from residential and commercial sales of 0.45% and 0.43% respectively. (See Table 1) This is a decrease from the previous year when the residential and commercial customers were **surcharged** \$1,295,861 and \$1,142,484 respectively (See Table 2).

Table 1

### **Impact of WNA Rider on Residential & Commercial Revenues November 1, 2002 - April 30, 2003**

	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider on Revenues</u>
Residential Sales	\$ 158,753	\$ 35,387,169	0.45%
Commercial Sales	<u>134,516</u>	<u>31,204,782</u>	0.43%
Total	<u>\$ 293,269</u>	<u>\$ 66,591,951</u>	0.44%

Table 2

### **Amount Surcharged (Refunded) 2000 - 2003**

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/(Refund)</u>
11/00-4/01	\$ (45,684)	\$ (81,769)	\$ (127,453)
11/01-4/02	1,295,861	1,142,484	2,438,345
11/02-4/03	<u>158,753</u>	<u>134,516</u>	<u>293,269</u>
Total	<u>\$ 1,408,930</u>	<u>\$ 1,195,231</u>	<u>\$ 2,604,161</u>

## VI. WNA FINDINGS

The Staff's audit results showed a net **over-collection** from CGC's ratepayers in the amount of **\$15,942**. See table below for a breakdown of this amount by month and rate class:<sup>4</sup>

Month	Residential	Multi-Family	Commercial	Total
November 2001	\$ 0	\$ 0	\$ 0	\$ 0
December 2001	(3,142)	(41)	(5,845)	(9,028)
January 2002	0	0	0	0
February 2002	(5,226)	0	(919)	(6,145)
March 2002	(724)	0	(663)	(1,387)
April 2002	<u>616</u>	<u>0</u>	<u>2</u>	<u>618</u>
<b>Total</b>	<b><u>\$ (8,476)</u></b>	<b><u>\$ (41)</u></b>	<b><u>\$ (7,425)</u></b>	<b><u>\$ (15,942)</u></b>

This net under-collection resulted from one (1) finding, which is described in detail beginning on page 6.

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<sup>4</sup> Positive nos. represent an under-collection. Negative nos. () represent an over-collection.

## **FINDING #1:**

### **Exception**

The actual heating degree-days the Company calculated for bill groups (cycles) 10-13 in December 2002, bill groups (cycles) 19-21 in February 2003, bill groups (cycles) 7 and 15 in March 2003, and bill groups (cycles) 15, 16, and 21 in April 2003 do not agree with the actual heating degree-days filed by the Company on its EOM (End of Month) reports.<sup>5</sup>

### **Discussion**

The Company supplies the TRA with its calculation of the WNA factors for each bill group (cycle) during the heating season. Part of the calculation formula is the total actual heating degree-days<sup>6</sup> in that cycle. The Company obtains actual heating degree-day information on a daily basis. At the end of each month it supplies the TRA Staff with its EOM report which lists the daily heating degree-days that CGC used in its cycle WNA calculations. For the bill groups (cycles) referenced above, the WNA factors calculated used total actual heating degree-days that differed from the totals Staff arrived at when using the information supplied on the EOM reports. See the table below for a summary of the discrepancies.<sup>7</sup>

Month	Bill Group	CGC's Total ADD <sup>8</sup>	Staff's Total ADD <sup>9</sup>	Difference
December	10	571	579	+8
December	11	613	621	+8
December	12	620	628	+8
December	13	611	642	+31
February	19	853	868	+15
February	20	741	756	+15
February	21	744	759	+15
March	7	671	672	+1
March	15	512	520	+8
April	15	238	239	+1
April	16	235	236	+1
April	21	192	188	-4

<sup>5</sup> The Company-supplied EOM report is Staff's source for comparing the Company's daily actual heating degree-days to the NOAA monthly report.

<sup>6</sup> The total actual heating degree-days for a cycle is the sum of the actual degree-days for each day in the cycle.

<sup>7</sup> This type of finding was also noted in the last two years' audit reports in Docket Nos. 01-00591 and 02-00797.

<sup>8</sup> Total actual heating degree-days (ADD) CGC used to calculate the WNA factors for these bill groups.

<sup>9</sup> Total actual heating degree-days (ADD) Staff calculated from CGC's EOM reports.

## Company Response

The Company's EOM (End of Month) reports detail daily degree days from NOAA that are in the Company's billing system at the end of the month. During the month, actual degree days are entered each day. Errors sometimes occur, but are limited by a review process by the rates department. Corrections to errors are made as soon as possible to match NOAA. In each example cited below, the errors were quickly discovered and corrected to limit the number of affected billing cycles. The EOM report would not reflect any errors occurring during the month that have been corrected by the end of the month. The Company provides Staff with daily WNA reports (CURBI084 report) that detail the number of actual and normal degree days used in the WNA calculation for each billing cycle. These CURBI084 reports accurately reflect what was billed to the end-use customer on a cycle-by-cycle basis.

As for the discrepancy between actual degree days calculated and NOAA actual degree days for the above-mentioned bill groups, the Company agrees with Staff's findings and submits the following details of how the discrepancies occurred:

### **Actual Degree Days – Explanation of Differences**

*5 input errors and 3 rounding differences (8 events) resulted in 12 billing cycles to contain discrepancies*

<u>8 Events</u>	<u>Month</u>	<u>Bill Group</u>	<u>Difference</u>	<u>Explanation</u>
1	December	10	8	Error in input of temps on Dec 6. Difference of 8 D Days. Affected 4 Bill Groups
1	December	11	8	Error in input of temps on Dec 6. Difference of 8 D Days. Affected 4 Bill Groups
1	December	12	8	Error in input of temps on Dec 6. Difference of 8 D Days. Affected 4 Bill Groups
1 and 2	December	13	31	Error in input of temps on Dec 10. Difference of 23 D Days plus 8 D Days from previous error. Affected 1 Bill Group
3	February	19	15	Error in input of temps on Feb 17. Difference of 15 D Days. Affected 3 Bill Groups
3	February	20	15	Error in input of temps on Feb 17. Difference of 15 D Days. Affected 3 Bill Groups
3	February	21	15	Error in input of temps on Feb 17. Difference of 15 D Days. Affected 3 Bill Groups
4	March	7	1	Difference due to rounding
5	March	15	8	Error in input of temps on Mar 12. Difference of 8 D Days. Affected 1 Bill Group
6	April	15	1	Difference due to rounding on April 11. Difference of 1 D Day. Affected 2 Bill Groups – Notified TRA by letter.
7	April	16	1	Difference due to rounding on April 11. Difference of 1 D Day. Affected 2 Bill Groups – Notified TRA by letter.
8	April	21	-4	Error in input of temps on April 4. Difference of 4 D Days.

## **VII. RECOMMENDATIONS AND CONCLUSIONS**

This is the third audit in a row that there have been discrepancies between the actual degree days used in the calculation of the WNA factor for certain cycles and the EOM (End of Month) reports. According to the Company's response to the current finding, the EOM reports reflect the actual degree days that are in the Company's billing system at the end of the month. In some instances, they include corrections to errors discovered during the month. So, while there were no errors in actual degree days as compared to NOAA at the end of each month, errors did occur during several months that affected a number of billing cycles (see Staff Finding). Three instances were the result of rounding differences in the degree-day formula. However, the remainder were computer input errors. Again, Staff recommends that the Company examine its internal review process. While the \$15,972 over-collection is not material, the potential exists for significant error.

The Company has indicated that it intends to include the WNA over-collection in its next calculation and filing of Chattanooga's Actual Cost Adjustment (ACA) refund/(surcharge). Staff agrees with this method of refunding the over-collection to the Company's customers.